

PATENT COOPERATION TREATY

Translation

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference

P04734500

Date of mailing
(day/month/year)

18-05-2004

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/JP2004/000607

International filing date (day/month/year)

23-01-2004

Priority date (day/month/year)

24-01-2003

International Patent Classification (IPC) or both national classification and IPC

G01L 1/16

Applicant

Matsushita Electric Industrial Co., Ltd.

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input checked="" type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input checked="" type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/JP

Date of completion of this opinion

Authorized officer

Facsimile No.

Telephone No.

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Box No. I

Basis of the report

1. With regard to the language, this opinion has been established on the basis of:
☐ the international application in the language in which it was filed
☐ the translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rule 12.3(a) and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ on paper
☐ in electronic form
 - c. time of filing/furnishing
☐ contained in the international application as filed
☐ filed together with the international application in electronic form
☐ furnished subsequently to this Authority for the purposes of search
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. IV

Lack of unity of invention

1. ☐ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has, within the applicable time limit:
- ☐ paid additional fees
 - ☐ paid additional fees under protest and, where applicable, the protest fee
 - ☐ paid additional fees under protest but the applicable protest fee was not paid
 - ☐ not paid additional fees
2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:
- ☐ complied with
 - ☒ not complied with for the following reasons:

The invention that is set forth in claim 1 (and the claims that cite claim 1) pertains to a pressure sensor which is sealed by subjecting one of the end parts of the sensor housing member to a heat treatment.

The inventions that are set forth in claims 10 and 15 (and the claims that cite claims 10 and 15) pertain to a pressure sensor wherein a lubricating agent is filled between the pressure sensing means and the sensor housing member.

4. Consequently, this opinion has been established in respect of the following parts of the international application:
- ☒ all parts
 - ☐ the parts relating to claims Nos. _____

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Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Claims 1-17

YES

Claims

NO

Inventive step (IS)

Claims

YES

Claims 1-17

NO

Industrial applicability (IA)

Claims 1-17

YES

Claims

NO

2. Citations and explanations:

Document 1: JP 2001-201409 A (Matsushita Electric Ind. Co., Ltd.), 27 July 2001, entire text, all drawings

Document 2: JP 2002-350250 A (Kabushiki Kaisha Auto Network Gijutsu Kenkyusho), 04 December 2002, paragraphs [0033] to [0034] and fig. 1

Document 3: JP 2001-99723 A (Matsushita Electric Ind. Co., Ltd.), 13 April 2001, paragraph [0040] and fig. 1

Document 4: JP 3049283 B2 (Kabushiki Kaisha Shosan Gosei Jushi Seisakusho), 05 June 2000, paragraphs [0030] to [0032] and fig. 3 to 4

The inventions that are set forth in claims 1 to 2, 9 and 12 to 14 do not involve an inventive step in the light of document 1 and document 2 cited in the international search report. It would be easy for a person skilled in the art to conceive of employing the feature wherein the end part of the cover member is sealed, which is disclosed in document 2, in the pressure sensing means (4) that is disclosed in document 1. In addition, it would also be easy for a person skilled in the art to conceive of using a heat treatment as the

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sealing method.

The invention that is set forth in claims 3 to 4 does not involve an inventive step in the light of document 1 and document 2. It would be easy for a person skilled in the art to conceive of employing recessed parts, protruding parts, cuneiform parts and/or pins in order to increase the mounting strength of the members.

The invention that is set forth in claim 5 does not involve an inventive step in the light of document 1 and document 2. It would be easy for a person skilled in the art to conceive of providing a cap-shaped member to the end part of a tubular member such as the pressure sensor that is disclosed in document 1.

The invention that is set forth in claims 6 to 8 does not involve an inventive step in the light of document 1 and document 2. Document 1 (paragraph [0022] and fig. 3) discloses a configuration for an elastic member that has a hollow section.

The inventions that are set forth in claims 10, 15 and 17 do not involve an inventive step in the light of document 3 and document 4. It would be easy for a person skilled in the art to conceive of employing the feature wherein a lubricating agent is coated upon the outer peripheral surface of a tube, which is disclosed in document 4, in relation to the inner peripheral surface of the flexible support member (14) in the pressure sensor that is disclosed in document 3.

The inventions that are set forth in claims 11 and 16 do not involve an inventive step in the light of document 3, document 4 and document 2. It would be easy for a person skilled in the art to conceive of employing the feature wherein the end part of the cover member is

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sealed, which is disclosed in document 2, in the pressure
sensor that is disclosed in document 3.

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Box No. VI

Certain documents cited

1. Certain published documents (Rule 43bis.1 and 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
JP 2003-302294 A [E, X]	24-10-2003	10-04-2002	

2. Non-written disclosures (Rule 43bis.1 and 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)
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